

Soldiers

Online



New Equipment for Urban Combat

Story by SSG John Valceanu
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"It's a really good opportunity for us to do our part to try to make sure the Army gets the equipment it needs. I think we're all pretty proud of being on the cutting edge."

(Left) A soldier blows down a door using the Rafael Simon Breaching Round. Made by the Israeli government, the device is one of the many off-the-shelf products demonstrated by the Army during MOUT ACTD.

(Right) The breaching round will allow infantrymen to reduce casualties by blowing in doors and windows before assaulting a building.

URBAN combat is a nightmare for light infantry. A well-placed sniper on the roof of a building can take out an entire platoon or more of dismounted soldiers. A handful of defenders hiding in a city's buildings can hamper the movements of an entire battalion.

The problems faced by infantrymen in cities are compounded by limited visibility and lack of adequate, accurate intelligence — a natural result of operating near buildings that provide the enemy cover and concealment. And the presence of noncombatants further complicates an already difficult situation.

While U.S. soldiers are probably better trained and equipped than any potential enemy, the limitations imposed by urban combat negate much of this advantage. A good example is the 1993 firefight in Mogadishu, Somalia, in which Somali militiamen killed 18 American soldiers. The Somalis used the urban terrain in their favor, putting the U.S. troops at a decided disadvantage.

Sheila Ryan, MOUT ACTD public affairs specialist, contributed to this story. Sarah Underhill is a photographer for the U.S. Army Systems Center at Natick, Mass.

The Military Operations in Urban Terrain Advanced Concept Technology Demonstration was formed in 1997 to help remedy problems identified by a 1994 Defense Science Board study on military operations in built-up areas. The MOUT ACTD is a joint program, and its integration of innovative technology into both Army and Marine Corps infantry operations allows soldiers and marines to use new equipment and demonstrate its effectiveness.

The 10th Mountain Division's 2nd Battalion, 22nd Infantry Regiment, is the Army's MOUT ACTD "test" unit, and it will participate in the Joint Combined Force – Advanced



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The nonlethal blunt trauma training round is a more effective training tool for urban warfare than MILES gear. Similar to sport paintball systems, the rounds leave no doubt that a soldier has been hit when they impact.

Warfighter Experiment scheduled for this month at the Joint Readiness Training Center at Fort Polk, La. A Marine Corps MOUT ACTD company will also take part in the JCF-AWE, which is the culminating demonstration of the MOUT ACTD.

"The point is to increase the dominance of American infantry in urban environments," said MAJ Richard Stockton, MOUT ACTD division chief for the Dismounted Battlespace Battle Lab. "Our technology gives us a great advantage in the desert and in open spaces, but we lose our technical advantage in tight spaces. With this program, we try to regain that advantage."

The MOUT ACTD experiment at Fort Polk will demonstrate approximately 25 innovative products.

Soldiers from the 10th Mountain Division launch an unmanned aerial reconnaissance plane. Such remote-controlled devices can act as eyes and ears for infantrymen without putting human lives at risk.



These range in technological sophistication from such relatively simple devices as collapsible ladders to unmanned, remote-controlled reconnaissance aircraft. In between, there are many useful products. For example, there is an improved body armor system that is more efficient than the old "flak vest." There is also a platoon intercom system that gives each soldier an individual radio set, greatly improving communications within a platoon.

On the more technologically sophisticated end of the scale are the Pointer remote-controlled intelligence-gathering aircraft and the ArcView computer software, which produces

hole in reinforced concrete and brick.

Not all of the new technologies are focused on real-world combat, however. The Simunitions 9mm nonlethal blunt training round provides a more realistic system than MILES gear during close-quarters combat training. The Simunitions round is similar to a paintball, dispensing a hearty wallop to soldiers who are hit and leaving no doubt that someone was, indeed, shot.

"We generally focused on squad- and platoon-level technologies in this program — what we call 'kick-in-the-door' technologies," Stockton said.

accurate, current maps. These devices give commanders the information needed to make intelligent decisions and select the proper courses of action.

On a more explosive note, there is the Rafael Simon Breaching Round, which operates with an M-16 rifle. Fired from a safe distance, the round can blow apart a door or window, allowing soldiers to enter a building much more quickly than if they'd had to use a battering ram. If there is no door or window, soldiers can use explosive cutting tape, which acts as a shaped charge and blows a man-sized



Rangers prepare to take cover before blowing a hole in a brick wall with explosive cutting tape. The soldiers were testing the equipment at Fort Benning.

“We took a look at how we suffered the worst casualties in MOUT fighting, and we found that soldiers were most vulnerable on the streets. So we looked for products to get them off the streets and into the buildings quickly.”

Soldiers who have been working with the new products are impressed, for the most part.

“These technologies allow soldiers to bring a lot of flexibility to the fight,” said CPT Richard Van Gorden, commander of Company B, 2nd Bn., 22nd Inf. “It’s a really good opportunity for us to do our part to try to make sure the Army gets the equipment it needs. I think we’re all pretty proud of being on the cutting edge.”

1LT Don Fagnan, Co. B’s executive officer, said the most exciting part for him was being able to take part in improving the equipment.

“When we find what we think is a fault or deficiency in a product, we give feedback to the contractors. A few weeks later, the equipment comes back to us with improvements. It’s stronger

and more soldier-worthy,” Fagnan said. “I think that’s great.”

To go with the new technologies and products, new tactics, techniques and procedures have been developed by the MOUT ACTD and adopted by the 10th Mtn. Div. for its MOUT Leaders Combat Certification Course. According to BG Gary Speer, the assistant division commander for operations, unit capabilities have already increased as a result of the new TTPs, equipment and training manuals.

“Most of this stuff is great, and it will help us out a lot,” said SGT Eric Vanhees, a Co. B squad leader. “The door blower works well, and so does the explosive tape. The paintball round is much better than MILES. It gives



The detonation of the explosive tape creates an instant entry way for the rangers. Such new equipment will greatly enhance the ability of infantrymen to fight in urban terrain.

you the reality of live rounds coming at you.

“But some of the stuff can still use some work,” Vanhees added. “For example, the new body armor is a good concept, but it tends to constrict circulation. After you’ve worn it a while, your fingertips go numb. Overall, though, we’re very glad to have this stuff, and I’m glad they’re asking for our opinions on it.” □

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